

What is claimed is:

1. A method for producing a dental prosthesis for a patient, comprising the steps of:
measuring a tooth of the patient, the measuring step comprising moving a probe towards
and away from the tooth, wherein the probe provides light to the surface of the tooth, and
receives light reflected from the tooth through a plurality of receiving fiber optics, wherein the
tooth is measured when the light received from the plurality of receiving fiber optics peak
substantially simultaneously, wherein the measuring produces data indicative of the characteristics
of the tooth;
generating data for the dental prosthesis based on the measured data; and
preparing the dental prosthesis.